

Amendment under 37 CFR 1.111 and Submission of
Proposed Drawing Corrections
Serial No. 09/769,901
August 27, 2002

IN THE CLAIMS

Please substitute claims 1 and 6 for the pending claims with the same numbers respectively:

--1. (Amended) A method of controlling an induction generator, said method comprising the steps of:

measuring a plurality of current amounts in the generator using a plurality of current sensors;

transforming the plurality of current amounts into a two phase reference system;

measuring a DC voltage supplied to an inverter, the inverter being operatively connected to the generator;

measuring a plurality of generator voltages;

transforming the plurality of generator voltages into the two phase reference system;

calculating a flux in the generator using the currents and the voltages obtained by said steps of transforming so as to obtain a magnitude and position of the flux;

comparing the calculated flux magnitude with a desired flux to determine a flux error amount, the flux error amount being input to a flux regulator;

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determining a d-axis voltage so as to reduce the flux error amount;

comparing a desired DC voltage with the measured DC voltage to determine a voltage error amount, the voltage error amount being input to a voltage regulator;

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determining a desired torque amount so as to reduce the voltage error amount;

comparing the desired torque amount with an estimated torque amount to determine a torque error amount, the torque error amount being input to a torque regulator;

determining a q-axis voltage so as to reduce a torque error amount; and

transforming the d-axis voltage and the q-axis voltage to stationary reference frame, n-phase voltages using the position of the flux, wherein n is substantially equal to a number of generator phases.--

-- 6. (Amended) A method of controlling an induction generator, said method comprising the steps of:

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measuring a plurality of current amounts in the generator using a plurality of current sensors;

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transforming the plurality of current amounts into a two phase reference system;

measuring a DC voltage supplied to an inverter, the inverter being operatively connected to the generator;

measuring a plurality of generator voltages;

transforming the plurality of generator voltages into the two phase reference system;

calculating a flux in the generator using the currents and the voltages obtained by said steps of transforming so as to obtain a magnitude and position of the flux;

comparing the calculated flux magnitude with a desired flux to determine a flux error amount, the flux error amount being input to a flux regulator;

determining a d-axis voltage so as to reduce the flux error amount;

determining a desired torque amount by obtaining a desired generator shaft torque amount and converting the desired generator shaft torque amount to the desired torque amount by a mapping function;

comparing the desired torque amount with an estimated torque amount to determine a torque error amount, the torque error amount being input to a torque regulator;

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determining a q-axis voltage so as to reduce a torque error amount; and

transforming the d-axis voltage and the q-axis voltage to stationary reference frame n-phase voltages using the position of the flux, wherein n is substantially equal to a number of generator phases.--

REMARKS

By this amendment, the specification has been amended and proposed drawing changes are proposed for Figs. 1 and 2 and new Fig. 3 to be added to the application. Also, claims 1 and 6 have been amended. Currently, claims 1-20 are pending in the application.

Examiner Gonzalez and Supervisory Patent Examiner Ramirez are thanked for the courtesies extended to the undersigned and Mr. Stefanovic during the personal interview on June 10, 2002. During the interview, claims 1 and 5 and U.S. Patent Nos. 6,014,007 (Seibel et al.) and 6,094,364 (Heikkila) were discussed in detail.

The drawings were objected to under 37 CFR 1.83(a). The Examiner indicated that the generator, the plurality of current